



802.11b/g Wireless LAN + GPRS/GSM

Combo Cardbus PC Card



WGC2400 Combo Card is a device that lets you connect notebook to a wireless local area network (LAN), GSM and GPRS network simultaneously. A wireless LAN is like a regular LAN, except that you can share information without looking for a place to plug in, and augment networks without installing or moving wires. Based on radio frequency (RF) technology, a wireless LAN transmits and receives data over the air, along with the guarantee to provide privacy and noninterference by the use of separate radio frequency. GPRS is a new wireless technology standard which improve the data service that can be added to GSM-based personal communications service network and enable interoperability between the Internet and the GSM network.

WGC2400 supports 802.11b and IEEE draft Std 802.11g systems. While the proprietary application of PBCCE technology in 802.11b mode of operation provides data rates up to 22 Mbit/s, data rates up to 54 Mbit/s may be provided in 802.11g mode of operation.

WGC2400 is a tri-band Type II card that lets you connect notebook to GSM and GPRS network. It sends and receives data via mobile telephone networks, so it allows you to take full advantage to access to your corporate network, e-mail, and the Internet worldwide.

WGC2400 allows you to take full advantage of your PC's mobility with access to real-time information and online services anytime and anywhere. Plus, with the network installation simplicity and flexibility, you can eliminate the need to pull cable through walls and ceilings and allow the network to go where wires cannot go. Exploring WWW and augmenting networks can never be done more easily.

Features

Wireless LAN

- Complies with IEEE 802.11 b/g for 2.4GHz Wireless LAN.
- Works with all existing network infrastructure.
- Complies with specific wireless products and services.
- Capable of up to 256-Bit WEP Encryption; Support WPA.
- Freedom to roam while staying connected.
- 22-Mbps Packet Binary Convolution Coding (PBCC) (according to the 802.11b high-rate spec)
- Up to 54 Mbps may be provided in 802.11g mode of operation
- Rich diagnostic LED indicators with Integrated Antenna.

GPRS/GSM

- Provides data connectivity at speeds of up to 85.6kpbs.
- GPRS/GSM over-air security with built-in authentication and encryption
- Uses GPRS/GSM wireless system to connect computer to network or Internet.
- Freedom to roam while staying connected
- Provide audio function
- Complies with CardBus 7.0 specification.
- Supports PC Card hot swap and true Plug & Play.
- Complies with Window 98/2000/ME/XP/PocketPC 2002
- Easy to install and configure

Specification

Wireless LAN Specifications



Standard	IEEE 802.11b, IEEE 802.11g standard, Wi-Fi Compliant
Host Interface	32Bit Cardbus interface
Antenna	Two antennas diversity supported
Frequency Range	2.412GHz-2.4835GHz
Number of Selectable Channels	USA, Canada: 11 channels Europe: 13 channels Japan: 14 channels
Modulation Technique	802.11b: Direct Sequence Spread Spectrum (PBCC, CCK, DQPSK, DBPSK) 802.11g: Orthogonal frequency division multiplexing
Data Rate	802.11b(22Mbps, 11 Mbps, 5.5 Mbps, 2 Mbps, 1 Mbps) 802.11g(54 Mbps, 48 Mbps, 36 Mbps, 24 Mbps, 18 Mbps, 12 Mbps, 9 Mbps, 6 Mbps)
Preamble	802.11b: Both Short and Long preamble 802.11g: Long preamble only
Security	Hardware-Based Encryption/Decryption Using 64-, 128-, and 256-Bit Wired-Equivalent Privacy (WEP) Keys Support WPA
Output Power	OFDM : 12dBm (54Mbps) CCK : 16 dBm (11Mbps)
Receiver Sensitivity	Meet 802.11b & 802.11g standard
Bit Error rate	Meet 802.11b & 802.11g standard
Media Access Protocol	CSMA/CA (Collision Avoidance) with ACK
GPRS/GSM Specifications	
Host Interface	PC Card TypeII slot
Chipset	BenQ M32 Module
Antenna	Internal Tri-band Antenna
LED Indicators	LINK: POWER ON ACT: LINK BASE STATION
Frequency Band	EGSM Tx : 880 ~ 915MHz EGSM Rx: 925 ~ 960MHz DCS Tx: 1710 ~ 1785 MHz DCS Rx: 1805 ~ 1880MHz PCS Tx: 1850 ~ 1910MHz PCS Rx: 1930 ~ 1990MHz
Operation mode	GPRS multi-slot class 10 mode (up to 4 download channels and 2 upload channels)
Coding Scheme	Supports all coding schemes (1,2,3 and 4)
Device Class	GPRS mobile station class B
SIM Interface	SIM card Holder: Type 3V
Transmission Power	Class 4(2W) for GSM900 Class 1(1W) for GSM1800 and GSM1900
Receiver Sensitivity @ARP BER <2.4%	-102dBm



Data Rate	GPRS data downlink transfer: 85.6 kbps(Max.) GPRS data uplink transfer: 21.4 kbps(Max.) SMS: Over CSD or GPRS connections
Other Specifications	
Power Requirement	Operating Voltage: 3.3V WLAN TX consumption mode: 520mA WLAN RX consumption mode: 425mA GPRS / GSM Active mode: 500 mA(Max.) GPRS / GSM Idle mode: 40 mA(Typical)
Physical Specifications	Weight: 60 g Dimension: 135(L) x 54 (W) mm
Environment Specifications	Operating Temperature: 0~60 ambient temperature Storage Temperature: -20~70 ambient temperature Operating humidity: 90% maximum (non-condensing) Storage humidity: 90% maximum (non-condensing)
Supported OS	Windows 2000; Windows XP